

IN THE CLAIMS:

What is claimed is:

1-11. (Cancelled)

12. (Currently amended) An apparatus monitoring HVAC control functions, comprising:
a microcontroller;
a digital temperature sensor coupled to the microcontroller;
a liquid crystal display coupled to the microcontroller;
a set of cursor buttons coupled to the microcontroller;
~~an electrically erasable programmable read-only memory~~ a first data structure of personal identification numbers coupled to the microcontroller;
a second data structure of historical system usage data coupled to the microprocessor;
an upload capable connector coupled to the ~~electronically erasable programmable read-only memory~~ microprocessor and to the first data structure;
a billing computer coupled to the second data structure;
a real time clock coupled to the microcontroller; and
a back up power supply coupled to the real time clock.

13. (Cancelled) ~~The apparatus of claim 12, wherein the electrically erasable programmable read-only memory includes a first data structure, the first data structure including a list of personal identification numbers.~~

14. (Currently amended) The apparatus of claim ~~13~~ 12, wherein the first data structure includes a member selected from the group consisting of singly linked lists, hashes, arrays, sorted arrays, binary trees, stacks, heaps, queues, dequeues, doubly linked lists, tables, and circular linked lists.

15. (Currently amended) The apparatus of claim 12, wherein ~~the electrically erasable programmable read-only memory includes a second data structure,~~ the second data structure ~~including~~ includes a list of time entries, each time entry associated with a personal identification number.

16. (Original) The apparatus of claim 15, wherein the second data structure includes a member selected from the group consisting of singly linked lists, hashes, arrays, sorted arrays, binary trees, stacks, heaps, queues, dequeues, doubly linked lists, tables, and circular linked lists.

17. (Currently amended) The apparatus of claim 15, wherein the ~~electrically erasable programmable read-only memory~~ second data structure includes a third data structure, the third data structure including a calendar.

18. (Original) The apparatus of claim 17, wherein the third data structure includes a member selected from the group consisting of singly linked lists, hashes, tables, arrays, sorted arrays, binary trees, stacks, heaps, queues, dequeues, doubly linked lists, and circular linked lists.

19. (Currently amended) The apparatus of claim 17, wherein ~~the electrically erasable programmable read-only memory~~ second data structure includes a fourth data structure, the fourth data structure including a list of user types.

20. (Original) The apparatus of claim 19, wherein the fourth data structure includes a member selected from the group consisting of singly linked lists, hashes, arrays, sorted arrays, binary trees, stacks, heaps, queues, dequeues, doubly linked lists, tables, and circular linked lists.

21. (Currently amended) The apparatus of claim 12, further comprising a wireless interface coupled to the ~~upload-capable connector~~ first data structure.

22. (Original) The apparatus of claim 21, further comprising a transceiver coupled to the wireless interface.

23. (Original) The apparatus of claim 22, further comprising a repeater coupled to the transceiver.

24. (Currently amended) The apparatus of claim 12, further comprising a serial interface, coupled to the ~~upload-capable connector~~ first data structure.

25. (Original) The apparatus of claim 24, further comprising a hand held personal data assistant coupled to the serial interface.

26. (Currently amended) The apparatus of claim 12, further comprising an auxiliary memory coupled to the microcontroller and the first data structure ~~electrically-erasable-programmable read-only memory~~.

27. (Original) The apparatus of claim 12, further comprising heating ventilation and air conditioning equipment coupled to the microcontroller.

28-30. (Cancelled)

31. (New) The apparatus of claim 12, wherein the billing computer is a central billing computer.

32. (New) The apparatus of claim 12, further comprising a plurality of relays coupled to the microprocessor.

33. (New) The apparatus of claim 12, further comprising a bus coupled to the first data structure and the microprocessor.